



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

Fig. 2

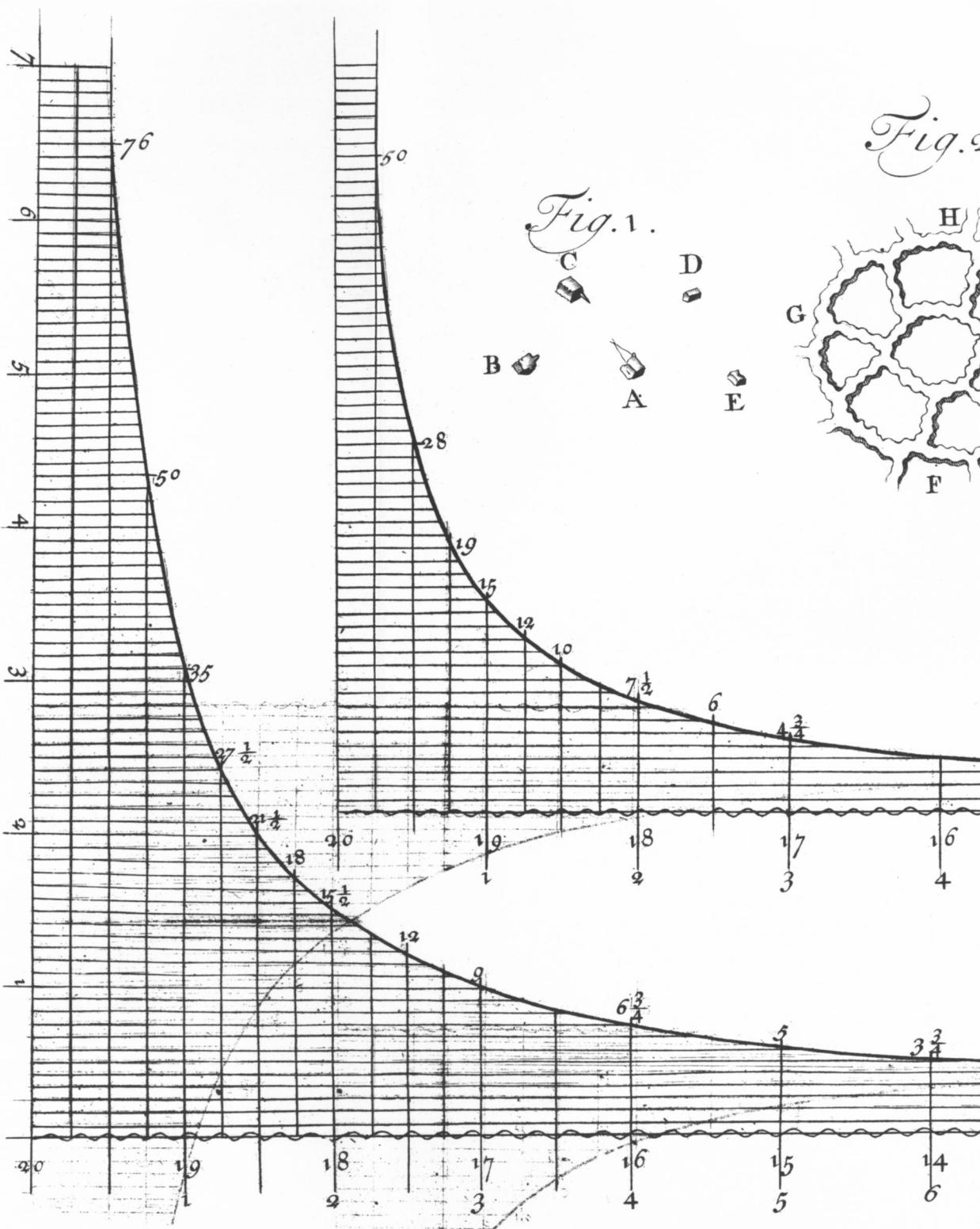


Fig. 2.

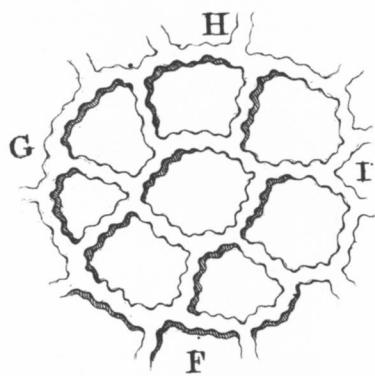


Fig. 3.

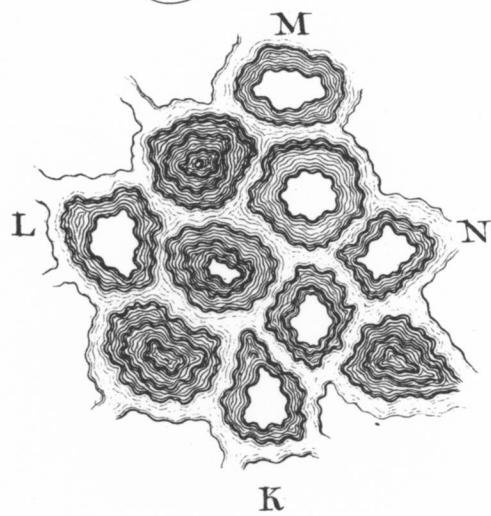


Fig. 4.

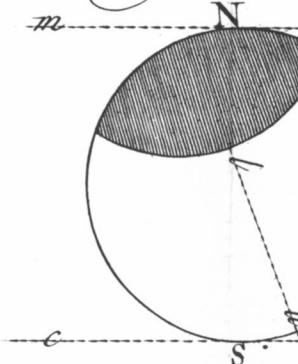


Fig. 6.

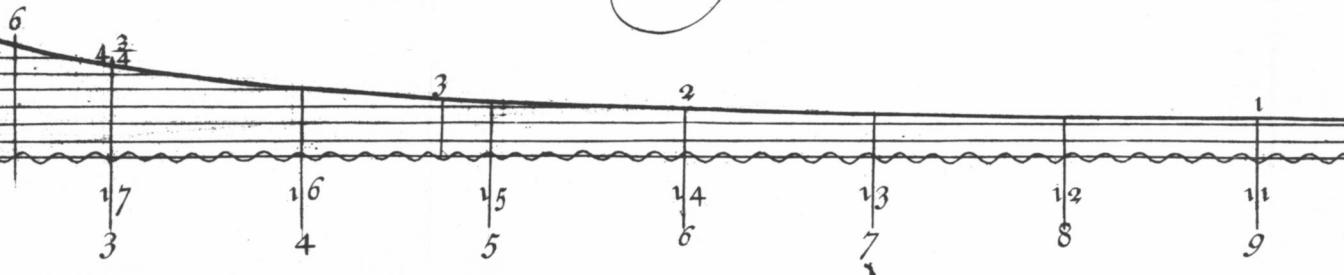
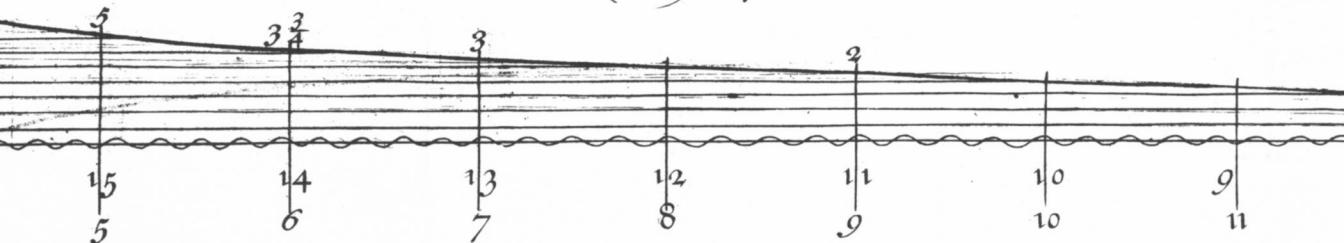
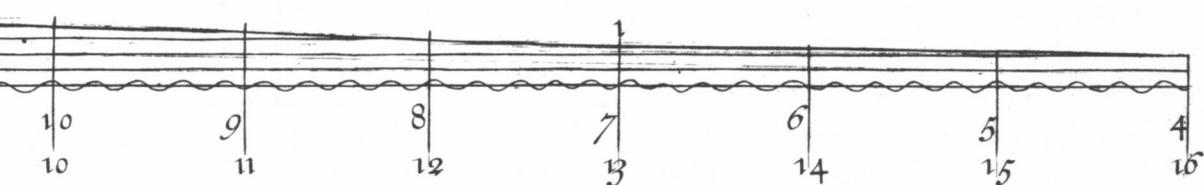
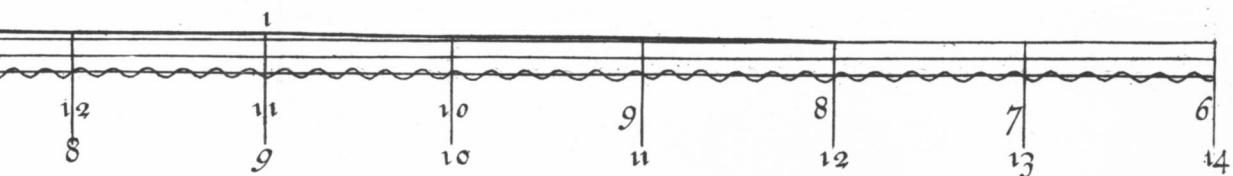
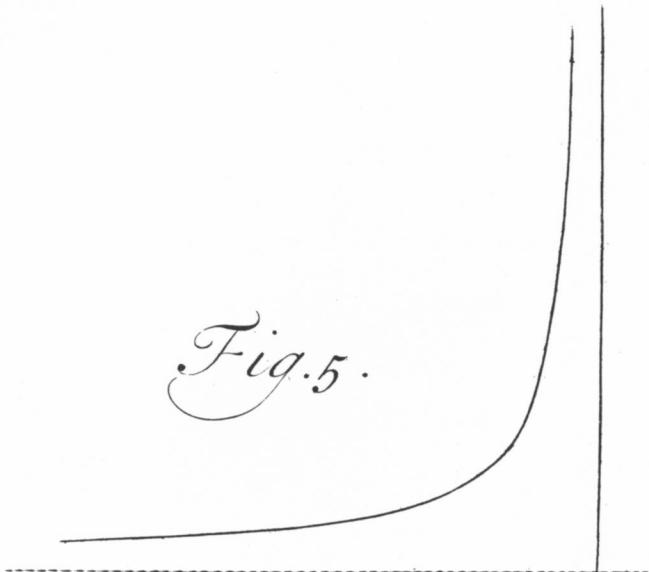
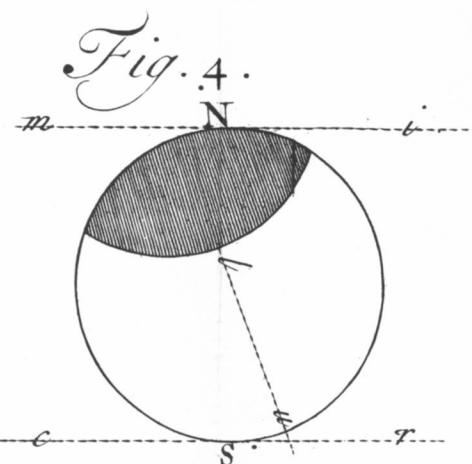


Fig. 7.





This is what I have thought proper to communicate
of my abovesaid Observations; and with great Respect
I remain,

Your most humble Servant,

Anthony van Leeuwenhoek.

II. *Observations of the Eclipse of the Moon, on
Jan. 12. 1711-12. By the Revd. Mr. Wm.
Derham, F. R. S. In a Letter to Rich. Waller
Esq; R. S. Secr.*

Upminster, Jan. 14. 1712.

S. I. R.,

Saturday Evening being clear, gave me a good opportunity of observing the Lunar Eclipse. The Times are very nice, and the Observations made with an excellent Six-foot Telescope, as followeth.

h.	15	A duskishness upon the N. East side of the Moon.
6.	36	A thick Penumbra on the Moon.
6.	37	The Penumbra so dense, that it may be taken for the Beginning of the Eclipse.
6.	39	The Eclipse undoubtedly is begun.
6.	41	The Shadow so dark, that it nearly hid the Moons N. Easternly Limb.
7.	23	Moons Diameter by the Micrometer 1612 equal parts, equal to 31° 25"

The.

7. 25' The distance of the Shadow from the opposite luminous Limb of the Moon, represented by the Line *l. n.* was 1025 Parts of the Micrometer, equal to 20 Minutes.

8. 31 End of the Eclipse is very near.

8. 32 End of the Eclipse.

8. 32 45" Eclipse is undoubtedly ended.

8. 36 A Penumbra is left.

It unluckily fell out, that I disordered my Micrometer at the Beginning of the Eclipse; so that I could not take with any exactness the Inclination of the Cusps, and some other Matters I had a mind to have observed; to supply which defect in some measure, I have sent you a Type of the Eclipse as well as I could by guess. And from the same defect I cannot warrant the Micrometrical Measures of the Moon's Diameter, and her eclipsed Parts to be otherwise, than somewhat near the truth; perhaps not exactly true.

Fig. 4. A Type of the Lunar Eclipse Jan. 12. 1711-12.
m. i. c. r. represents the two Claspers of the Micrometer,
parallel to the Equator.

N. The Northern, *S.* the Southern part of the Moons Disk, running between the Claspers of the Micrometer.

l. n. The enlightened part of the Moon, being 1025 Micrometrical Parts, or 20'

I am sorry I had not *Hevelius's Map of the Moon*, to have noted the Spots the Shadow passed over; but I hope to mend that defect, if I live to observe another Lunar Eclipse. With great Respect I am

Your most humble Servant,

W. DERHAM.